

IN THE CLAIMS

~~Cancel claims 1-10 without prejudice. Add new claims 11-20 as follows:~~

11. A method for operating a printer or copier device, comprising the steps
of:

- 5 acquiring at least one optical property of a print image carrier to be printed with a
print image with a sensor;
setting at least one printing parameter dependent on a sensor output signal of the
sensor;
printing the print image carrier in a printing event utilizing the at least one print
10 parameter that has been set step;
given a black-and-white printing with gray levels, acquiring a gray scale value of the
print image carrier with assistance of a brightness sensor;
setting at least one printing parameter that influences generation of the gray levels
dependent on an output signal of the brightness sensor;
15 utilizing a multi-level character generator when exposing a photoconductor in an
electrographic printer or copier device; and
setting illumination energies of the character generator allocated to specific light-
coding values dependent on the brightness sensor output signal.

12. A method for operating a printer or copier device, comprising the steps
20 of:

- acquiring at least one optical property of a print image carrier to be printed with a
print image with a sensor;
setting at least one printing parameter dependent on an output signal of the sensor;
printing the print image carrier in a printing event utilizing the at least one print
25 parameter that has been set;
given color printing, acquiring a color locus of the print image carrier with assistance

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of a color sensor;
determining rated color densities of colors to be printed with predetermined color
transformation relationships that allocate rated color densities for color
separations employed in the printing to the acquired color loci;
5 empirically determining transformation relationships before the printing event; and
storing the transformation relationships as at least one of analytical equations and a
table in a memory of the printer or copier device.

13. A method for operating a printer or copier device, comprising the steps
of:

10 acquiring at least one mechanical property of a print image carrier to be printed with
a print image with a sensor;

setting at least one printing parameter dependent on an output signal of the sensor;
printing the print image carrier in a printing event utilizing the at least one print
parameter that has been set;

15 acquiring roughness of a surface of the print image carrier with a roughness sensor;
setting toner quantity to be applied onto the print image carrier dependent on an
output signal of the roughness sensor, a charge potential of a photoconductor
collaborating in the printing event and an auxiliary potential of an allocated
development station being simultaneously modified.

20 14. A method according to claim 13, further comprising the step of:
modifying the printing parameters such that a size of picture elements of the print
image on the print image carrier remains approximately the same.

15. A method for operating a printer or copier device, comprising the steps
of:

25 acquiring at least one optical property of the print image carrier to be printed with a

print image with a sensor;

setting at least one printing parameter dependent on an output signal of the sensor;

printing the print image carrier in a printing event utilizing the at least one print

parameter that has been set;

5 acquiring light scatter of a surface of the print image carrier with an optical sensor;

- prescribing printing parameters that determine one of a raster tonal value and a gray

scale value and dimensions of fine print details dependent on the acquired

light scatter;

printing a raster toner mark onto the print image carrier; and

10 acquiring light that is one of reflected and scattered back in a region of the raster

toner mark with the optical sensor.

16. A method as claimed in claim 15, wherein the raster toner mark is applied utilizing the at least one printing parameter that has been previously defined dependent on one of a gray scale value and a color locus of the print image carrier.

15 17. A method as claimed in claim 11, wherein said method is implemented in an electrophotographic printer.

18. A method as claimed in claim 11, wherein said printing parameters are at least one of an illumination energy of an illumination device for exposing a light-sensitive element and an auxiliary potential in a developer unit for the application of
20 toner particles and a charge potential of the light-sensitive element.

19. A method as claimed in claim 11, wherein gray transformation relationships that indicate the illumination energies allocated to the light-coding values dependent on the gray scale value are utilized, said gray transformation relationships belonging to specific sensor output signals.

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20. A printer or copier device, comprising:

a printer unit for printing a print image carrier according to predetermined printing parameters;

5 a sensor unit for acquiring at least one optical or mechanical property of the print image carrier to be printed;

a control unit that sets at least one printing parameter dependent on an output signal of the sensor unit;

10 given gray scale printing, a brightness sensor which acquires a gray scale value of the print image carrier so that at least one printing parameter that influences generation of the gray levels is set dependent on an output signal of the brightness sensor;

15 given color printing, a color sensor which acquires a color locus of the print image carrier to that rated color densities of colors to be printed are determined with predetermined color transformation relationships that allocate rated color densities for color separations employed in the printing to the acquired color loci;

a roughness sensor to sense roughness of a surface of the print image carrier so that toner quantity to be applied onto the print image carrier is set dependent on an output signal of the roughness sensor;

20 a control to modify printing parameters such that size of picture elements of the print image on the print image carrier remains approximately the same;

an optical sensor to sense light scatter of the surface of the print image carrier;

a raster toner mark is printed onto the print image carrier so that light reflected the raster toner mark is acquired with the optical sensor;

25 printing parameters that determine at least one of raster tonal value and gray scale value and dimensions of fine print details being prescribed dependent on acquired light scatter.

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